

**CENTER FOR DRUG EVALUATION AND
RESEARCH**

APPLICATION NUMBER:

20-883

MICROBIOLOGY REVIEW

**REVIEW FOR HFD-180
OFFICE OF NEW DRUG CHEMISTRY
MICROBIOLOGY STAFF HFD-805**

**Microbiologist's Review #2 of NDA 20-883 Amendment
October 20, 1998**

OCT 20 1998

1. **APPLICATION NUMBER:** 20-883 Amendment

APPLICANT: Texas Biotechnology Corporation
7000 Fannin, Suite 1920
Houston, TX 77030
 2. **PRODUCT NAMES:** Novastan (Argatroban) Injection
 3. **DOSAGE FORM AND ROUTE OF ADMINISTRATION:** Each vial contains 2.5 ml of the formulation with 250 mg of argatroban. Novastan Injection is to be administered intravenously.
 4. **METHOD(S) OF STERILIZATION:** Aseptic fill _____
 5. **PHARMACOLOGICAL CATEGORY:** 1P. Novastan Injection is indicated for anticoagulant therapy in patients with heparin-induced thrombocytopenia.
- B. 1. **DATE OF INITIAL SUBMISSION:** August 11, 1997
2. **AMENDMENT:** July 8, 1998
 3. **RELATED DOCUMENTS:** _____
 4. **ASSIGNED FOR REVIEW:** August 17, 1998
 5. **DATE OF CONSULT REQUEST:** July 13, 1998
- C. **REMARKS:**

The submission responds to questions presented to the applicant as a result of Microbiologist's Review #1. The questions from the "List of Microbiology Comments and Deficiencies" have been copied into the "Review Notes" section of this review and the responses are individually reviewed.

D. CONCLUSIONS:

The submission is recommended for approval for issues concerning microbiology.

IS/ 10/20/98
Brenda Uratani, Ph.D.
Review Microbiologist
IS/ 10/20/98

cc:

NDA 20-883 Amendment
HFD-180/ Div. File
HFD-805/ Uratani
HFD-180/CSO/ J. DuBeau
drafted by: Brenda Uratani, 10/20/98
R/D initialed by P. Cooney, 10/20/98

**REVIEW FOR HFD-180
OFFICE OF NEW DRUG CHEMISTRY
MICROBIOLOGY STAFF HFD-805**

OCT 29 1997

Microbiologist's Review #1 of NDA 20-883
October 29, 1997

1. **APPLICATION NUMBER:** 20-883
- APPLICANT:** Texas Biotechnology Corporation
7000 Fannin, Suite 1920
Houston, TX 77030
2. **PRODUCT NAMES:** Novastan (Argatroban) Injection
3. **DOSAGE FORM AND ROUTE OF ADMINISTRATION:** Each vial contains 2.5 ml of the formulation with 250 mg of argatroban. Novastan Injection is to be administered intravenously.
4. **METHOD(S) OF STERILIZATION:** Aseptic fill _____
5. **PHARMACOLOGICAL CATEGORY:** 1P. Novastan Injection is indicated for anticoagulant therapy in patients with heparin-induced thrombocytopenia.
- B. 1. **DATE OF INITIAL SUBMISSION:** August 11, 1997
2. **AMENDMENT:** none
3. **RELATED DOCUMENTS:** _____
4. **ASSIGNED FOR REVIEW:** September 12, 1997
5. **DATE OF CONSULT REQUEST:** August 20, 1997

C. REMARKS:

Argatroban is a synthetic, small molecule, thrombin inhibitor derived from L-arginine. It is indicated for use in anticoagulant therapy in patients with heparin-induced thrombocytopenia. Novastan Injection, a single use parenteral formulation, contains no preservatives. The drug product is manufactured by _____

_____ Sterility test for the stability samples is to be performed by _____

_____ The pyrogen testing for stability
samples is to be performed by _____

D. CONCLUSIONS:

The NDA is approvable pending resolution of issues related to thermal qualification of the autoclave cycle and other sterility issues specified in the "List of Microbiology Comments and Deficiencies".

ISI
Brenda Uratani, Ph.D.
Review Microbiologist

10/29/97

ISI

10/29/97

cc:

NDA 20-883
HFD-180/ Div. File
HFD-805/ Uratani
HFD-180/CSO/ J. DuBeau
drafted by: Brenda Uratani, 10/29/97
R/D initialed by P. Cooney, 10/29/97